

Current Status of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended) A method for preparing a bioactive glycoprotein ~~by the~~ comprising in order the steps of:

extracting the fruiting body of *Grifola frondosa* with ethanol at room temperature, and removing the ethanol extract;

extracting the resulting residue with hot water at 100°-120° C, and adding ethanol to the hot water extract to a final ethanol concentration of 50-75% by volume;

removing the resulting precipitate and floating matter after standing at 4°-10° C for 8-12 hours, wherein said floating matter is on the liquid or in the liquid or adhering matter to vessel wall; and,

collecting a fraction of molecular weight equal to or greater than 14,000 daltons from the resulting supernatant.

Claim 2 (currently amended) The method for preparing a bioactive fraction as recited in Claim 1 wherein said collection of a fraction with a molecular weight equal to or greater than 14,000 daltons is performed by dialysis.

Claim 3 (currently amended) The method for preparing a bioactive fraction as recited in Claim 1 wherein said collection of a fraction with a molecular weight equal to or greater than 14,000 daltons is performed by ultrafiltration.

Claim 4 (currently amended) The method for preparing a bioactive fraction as recited in Claim 1 wherein said collection of a fraction with a molecular weight equal to or greater than 14,000 daltons is performed by centrifugal filtration.

Claim 5 (currently amended) The method for preparing a bioactive glycoprotein as recited in Claim 1 further comprising purifying said above fraction to obtain the glycoprotein with average molecular weight of 20,000 daltons.

Claim 6 (original) The method for preparing a bioactive glycoprotein as recited in Claim 5 wherein said purification is performed using gel filtration chromatography.

Claim 7 (original) The method for preparing a bioactive glycoprotein as recited in Claim 5 wherein said purification is performed using electrophoresis.

Claim 8 (original) The method for preparing a bioactive fraction containing a glycoprotein as a main component as recited in Claim 1 wherein said hot water extraction is performed at 1.2 atmospheres pressure.

Claim 9 (original) The method for preparing a bioactive fraction containing a glycoprotein as a main component as recited in Claim 1 wherein said removal of resulting precipitate and floating matter is performed at about 4° C.

Claim 10 (original) The method for preparing a bioactive fraction containing a glycoprotein as a main component as recited in Claim 1 wherein said removing of resulting precipitate and floating matter is performed by centrifugation.

Claim 11 (original) The method for preparing a bioactive fraction containing a glycoprotein as a main component as recited in Claim 1 wherein said removing of resulting precipitate and floating matter is performed by skimming.

Claim 12 (original) The method for preparing a bioactive fraction containing a glycoprotein as a main component as recited in Claim 1 wherein said removing of resulting precipitate and floating matter is performed by pipetting.

Claim 13 (currently amended) A bioactive fraction comprising a glycoprotein said glycoprotein having a protein to saccharide ratio ranging from about 75:25 to about 90:10 and a molecular weight equal to or greater than 14,000 daltons.

Claim 14 (currently amended) A bioactive glycoprotein wherein said bioactive glycoprotein possesses a protein to saccharide ratio ranging from about 75:25 to about 90:10 and an average molecular weight of about 20,000 daltons.

Claim 15 (original) An antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product comprising the bioactive fraction of Claim 13.

Claim 16 (original) An antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product comprising the bioactive glycoprotein of Claim 14.

Claim 17 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 further comprising vitamins.

Claim 18 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 further comprising minerals.

Claim 19 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 further comprising vitamins and minerals.

Claim 20 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 further comprising herbs, mushrooms, and other nutritional ingredients.

Claim 21 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 wherein said product may be in the form of a tablet.

Claim 22 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 wherein said product may be in the form of a capsule.

Claim 23 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 wherein said product may be in the form of a granule.

Claim 24 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 15 wherein said product may be in the form of a liquid, including tincture and drink.

Claim 25. (currently amended) A health food or ~~functional~~ food product ~~which may claim~~ comprising at least one of antidiabetic, antihypertensive, antiobesity and antihyperlipidemic activities wherein said bioactive glycoprotein of Claim 14 is used as a food additive.

Claim 26 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 further comprising vitamins.

Claim 27 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 further comprising minerals.

Claim 28 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 further comprising vitamins and minerals.

Claim 29 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 further comprising herbs, mushrooms, and other nutritional ingredients.

Claim 30 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 wherein said product may be in the form of a tablet.

Claim 31 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 wherein said product may be in the form of a capsule.

Claim 32 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 wherein said product may be in the form of a granule.

Claim 33 (original) The antidiabetic, antihypertensive, antiobesity and antihyperlipidemic product recited in Claim 16 wherein said product may be in the form of a liquid, including tincture and drink.

Claim 34 (original) A health food having one or more of the properties from the group consisting of antidiabetic, antihypertensive, antiobesity and antihyperlipidemic activities wherein said health food comprises the bioactive fraction of Claim 15 is used as a food additive.

Claim 35 (currently amended) A ~~functional~~ food product having one or more of the properties from the group consisting of antidiabetic, antihypertensive, antiobesity and antihyperlipidemic

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activities wherein said ~~functional~~ food product comprises the bioactive fraction of Claim 15 is used as a food additive.

Claim 36 (original) A health food having one or more of the properties from the group consisting of antidiabetic, antihypertensive, antiobesity and antihyperlipidemic activities wherein said health food comprises the bioactive glycoprotein of Claim 16.

Claim 37. (currently amended) A ~~functional~~ food product having one or more of the properties from the group consisting of antidiabetic, antihypertensive, antiobesity and antihyperlipidemic activities wherein said ~~functional~~ food product comprises the bioactive glycoprotein of Claim 16.